

CLAIMS

1 1. A device for implanting into a body vessel in the region of
2 a vessel branching, comprising a radially expandable stent formed as a
3 hollow cylindrical element and provided with an increase radial opening; and
4 a balloon catheter on which said stent is pre-mounted for implanting in the
5 vessel, said balloon catheter having a hollow chamber for passage of a
6 guiding wire so that it exits in a center of said increased opening from said
7 hollow chamber and said stent.

1 2. A device as defined in claim 1, wherein said balloon
2 catheter is provided with another longitudinal chamber extending along a
3 longitudinal axis of said catheter and formed so that a further guiding wire
4 exits at a tip of said balloon catheter.

1 3. A device as defined in claim 2, wherein said stent is
2 dilatable so that after a dilation of said stent, said balloon catheter is pullable
3 along said guiding wires out of the vessel.

1 4. A device as defined in claim 2, wherein said further guiding
2 wire is guided through said other hollow chamber out of said increased
3 opening.

1 5. A device as defined in claim 4, wherein said balloon
2 catheter has a balloon portion, said other hollow chamber for said further
3 guiding wire guided out of said increased opening being formed by a pipe
4 mounted on an outer surface of said balloon portion of said catheter.

1 6. A device as defined in claim 4, wherein said catheter has a
2 balloon portion which is formed as a double-walled balloon, said other hollow
3 chamber for guiding said further wire from said increase opening being
4 formed as an intermediate chamber of said double-wall balloon.

1 7. A device as defined in claim 4, wherein said balloon
2 catheter has a balloon portion, said other hollow chamber for guiding said
3 further wire out of said increased opening being formed as an intermediate
4 chamber between said balloon portion and a stretchable hose piece which
5 is pulled onto said balloon portion.

1 8. A device as defined in claim 2, wherein said balloon
2 catheter is composed of three coaxial hoses arranged so that two inwardly
3 located hoses form said hollow chambers for receiving said guiding wires.

1 9. A device as defined in claim 1, wherein said stent is
2 composed of a pipe and has a multi-cellular wall.

1 10. A device as defined in claim 1, wherein said stent is bent
2 from a wire.

1 11. A device as defined in claim 1, wherein said stent is
2 formed as a wire selected from the group consisting of structured wire,
3 knitted wire and twisted wire.

1 12. A device as defined in claim 1, wherein said increased
2 opening is arranged in a center of said stent.

1 13. A device as defined in claim 1, wherein said increased
2 opening is arranged eccentrically on said stent.